

REMARKS

Applicants respectfully request entry of the foregoing and reconsideration of the subject matter identified in caption, as amended, pursuant to and consistent with 37 C.F.R. §1.112, and in light of the remarks which follow.

Claims 20-21, 23-26, and 31-39 are pending in the application, claims 22 and 27-30 having been canceled above without prejudice or disclaimer.

By the above amendments, Applicants amended Claim 20 to further define additive $\beta 4$. Support for this amendment can be generally found in the specification and the original claims. Applicants also canceled Claims 22 and 27-30 without prejudice to or disclaimer of the subject matter therein.

Applicants thank the Examiner for Examiner-initialed copy of the Form PTO 1449 submitted with Applicants' First Information Disclosure Statement on May 5, 2006.

Turning now to the Official Action, Claim 30 stands objected to under 37 C.F.R. § 1.75 as being a substantial duplicate of Claims 23 and 27. As Applicants have canceled Claim 30 without prejudice or disclaimer, this objection is moot.

Claims 20-24, 27-34, and 38-39 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Nakanishi (U.S. Patent No. 5,847,181). For at least the reasons that follow, withdrawal of the rejection is in order.

Independent Claim 20 defines a process for the preparation of alkylhalosilanes which comprises reacting an alkyl halide with a solid body formed of silicon in the presence of a catalytic system comprising (α) a copper catalyst and (β) a group of promoting additives, wherein said group comprises:

an additive $\beta 1$ chosen from metallic zinc, a zinc-based compound or a mixture thereof,

an additive $\beta 2$ chosen from tin, a tin-based compound or a mixture thereof,

optionally, an additive $\beta 3$ chosen from cesium, potassium, rubidium, a compound derived from these metals or a mixture thereof, wherein

the copper catalyst (α) is in the form of metallic copper, a copper halide or a mixture thereof, and

the solid body includes a supplementary promoting additive $\beta 4$ wherein the additive $\beta 4$ is an alkali metal hypophosphite, an alkaline earth metal hypophosphite, a metal hypophosphite or a mixture thereof. (Emphasis added.)

Nakanishi relates to an improvement in the direct process for preparing an alkylhalosilane and more particularly, to a process for continuously preparing an alkylhalosilane by gas-solid contact reaction between metallic silicon and alkyl halide in the presence of a copper catalyst. (See Nakanishi at column 1, lines 5-11.)

It is well-established that in order to demonstrate anticipation under § 102(b), each feature of the claim at issue must be found, either expressly described or under principles of inherency, in a single prior art reference. See *Kalman v. Kimberly-Clark Corp.*, 218 U.S.P.Q. 798 (Fed. Cir. 1983). These requirements have not been met.

In particular, Applicants submit that Nakanishi fails to expressly or inherently describe a process for the preparation of alkylhalosilanes which comprises reacting an alkyl halide with a solid body formed of silicone in the presence of a catalytic system comprising a copper catalyst (α) and a group of promoting additives (β), including a supplementary promoting additive $\beta 4$ wherein the additive $\beta 4$ is an alkali

metal hypophosphite, an alkaline earth metal hypophosphite, a metal hypophosphite or a mixture thereof. In particular, Nakanishi only discloses phosphorous compounds including metal phosphides (e.g., phosphides of transition metals including W, Fe, Co, Ni, Cr, Mn, Cu, Bi, Mo, and Ti) and metal phosphates such as tricalcium phosphate, calcium metaphosphate, and calcium pyrophosphate in anhydrous salt form and salts thereof with 1A and 2A Group metals such as sodium, potassium and magnesium and 1B and 2B Group metals such as copper and zinc. Among these compounds, Nakanishi discloses that phosphates are preferred from the standpoint of cost and calcium pyrophosphate is most preferred. Nowhere does Nakanishi disclose or fairly suggest a process for the preparation of alkylhalosilanes wherein a solid body includes a supplementary promoting additive β_4 , as defined in independent Claim 20.

Accordingly, Claim 20 is patentable over Nakanishi. In addition, the remaining claims (Claims 21, 23-24, 31-34 and 38-39) depend, directly or indirectly, from Claim 20 and are, therefore, also patentable over Nakanishi for at least the reasons that Claim 20 is patentable. Reconsideration and withdrawal of the § 102(b) rejection over Nakanishi are respectfully requested.

Claims 20-39 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Nakanishi and further in view of Colin (U.S. Patent No. 7,238,638) and Halm (U.S. Patent No. 5,059,343). For at least the reasons that follow, withdrawal of the rejection is in order.

Independent Claim 20 is recited above. The remaining claims (Claims 21, 23-26 and 31-39) depend, directly or indirectly, from Claim 20 and, therefore,

necessarily include all the features in the combination of features defined in Claim 20.

To establish a *prima facie* case of obviousness, the prior art reference (or references when combined) must teach or suggest all of the claimed features. (See, *In re Royka*, 490 F.2d 981, 180 U.S.P.Q. 580 (C.C.P.A. 1974).) In addition, "all words in a claim must be considered in judging the patentability of that claim against the prior art." (See, *In re Wilson*, 424 F.2d 1382, 1385; 165 U.S.P.Q. 494, 496 (C.C.P.A. 1970).) (See, also M.P.E.P. § 2143.03).

As explained above, Nakanishi fails to disclose or fairly suggest certain features of independent Claim 20, including, for example, a supplementary promoting additive $\beta 4$ wherein the additive $\beta 4$ is an alkali metal hypophosphite, an alkaline earth metal hypophosphite, a metal hypophosphite or a mixture thereof. The secondary references do not overcome these deficiencies.

In particular, Applicants submit that Colin is not available as a prior art reference against this application. Colin is a continuation application of PCT/FR03/03613. Colin is not a § 371 National Stage Application. There is an international application in the continuity chain of Colin for which a benefit is properly sought via § 120 or 365(c) and the international application was filed on or after November 29, 2000. However, the WIPO publication of the international application was not in English. Thus, the § 102(e) date for Colin is the filing date of the U.S. Application, namely, June 9, 2005. The instant application is a § 371 Application of PCT/FR04/02759 and, therefore, is entitled to the international application's filing date of October 27, 2004, which predates the earliest available § 102(e) date of

Colin of June 9, 2005. A copy of the flow chart for determining 35 U.S.C. § 102(e) dates is attached.

Finally, Halm does not overcome the deficiencies of Nakanishi. That is, nowhere does Halm disclose or fairly suggest modifying the processes of Nakanishi to specifically include a supplementary promoting additive $\beta 4$ which is an alkali metal hypophosphite, an alkaline earth metal hypophosphite, a metal hypophosphite or a mixture thereof, as defined in independent Claim 20.

Accordingly, Applicants submit that the Official Action has not established a *prima facie* case of obviousness over the asserted combination of references because the references fail to disclose or fairly suggest each feature in the combination of features defined in independent claim 20. In addition, the asserted combination of references fails to provide a proper consideration of "all words" in Claim 20 in judging the patentability of that claim against the prior art. Specifically, the asserted combination does not reflect proper consideration of the words "a supplementary promoting additive $\beta 4$ wherein the additive $\beta 4$ is an alkali metal hypophosphite, an alkaline earth metal hypophosphite, a metal hypophosphite or a mixture thereof.

For at least these reasons, Applicants submit that Claim 20 is patentable over the combination of Nakanishi, Colin and Halm. The remaining claims depend, directly or indirectly, from Claim 20 and, therefore, are also patentable over the asserted combination of references for at the reasons that Claim 20 is patentable. Reconsideration and withdrawal of the rejection are respectfully requested.

From the foregoing, Applicants earnestly solicit further and favorable action in the form of a Notice of Allowance.

If there are any questions concerning this paper or the application in general,.
Applicants invite the Examiner to telephone the undersigned at the Examiner's
earliest convenience.

Respectfully submitted,

BUCHANAN INGERSOLL & ROONEY PC

Date: May 12, 2008

By:

A handwritten signature in black ink, appearing to read "Martin A. Bruehs", is written over a horizontal line.

Martin A. Bruehs
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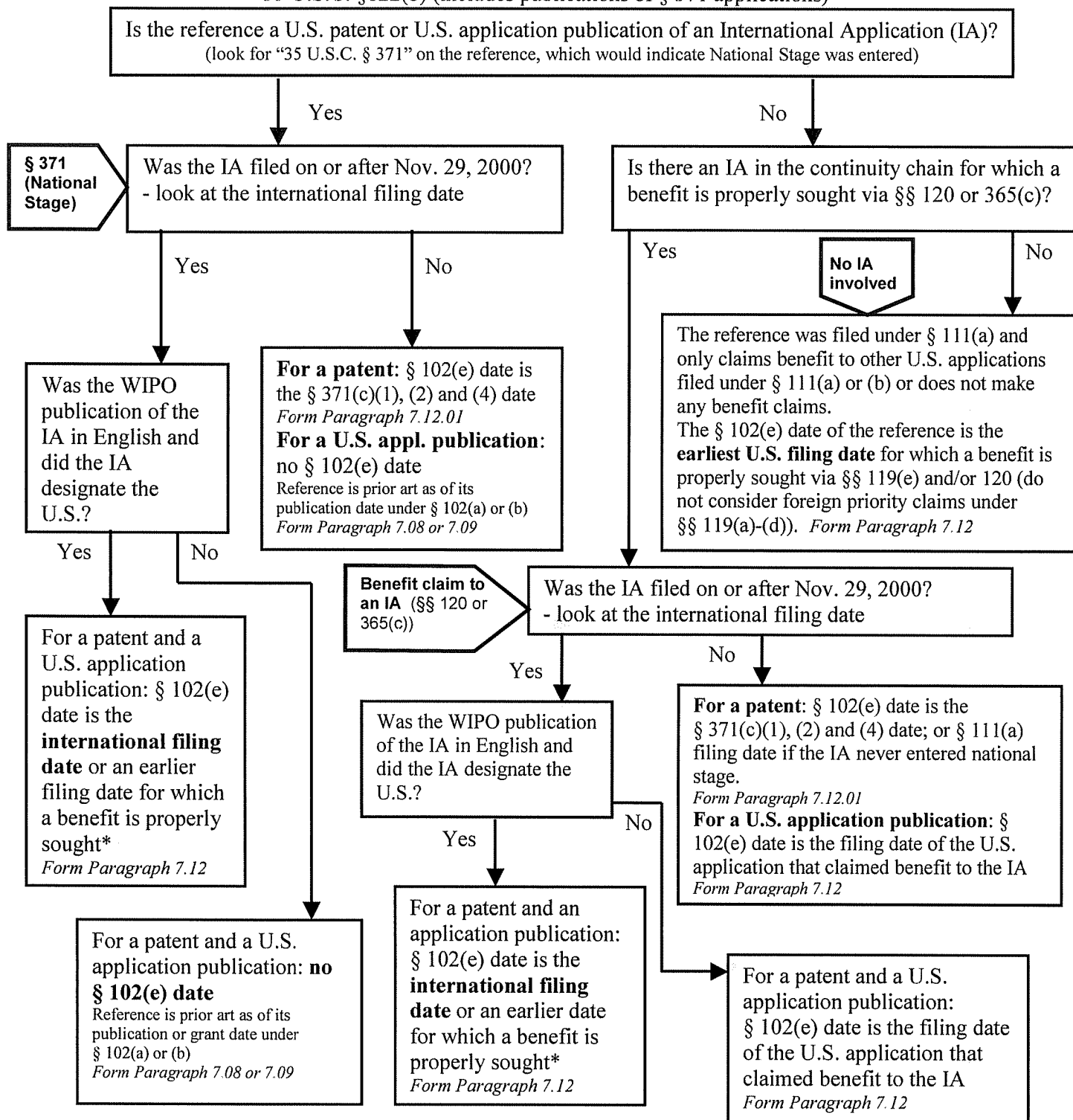
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Attachment: Flowchart for 35 U.S.C. § 102(e) dates.

FLOWCHARTS FOR 35 U.S.C. § 102(e) DATES:

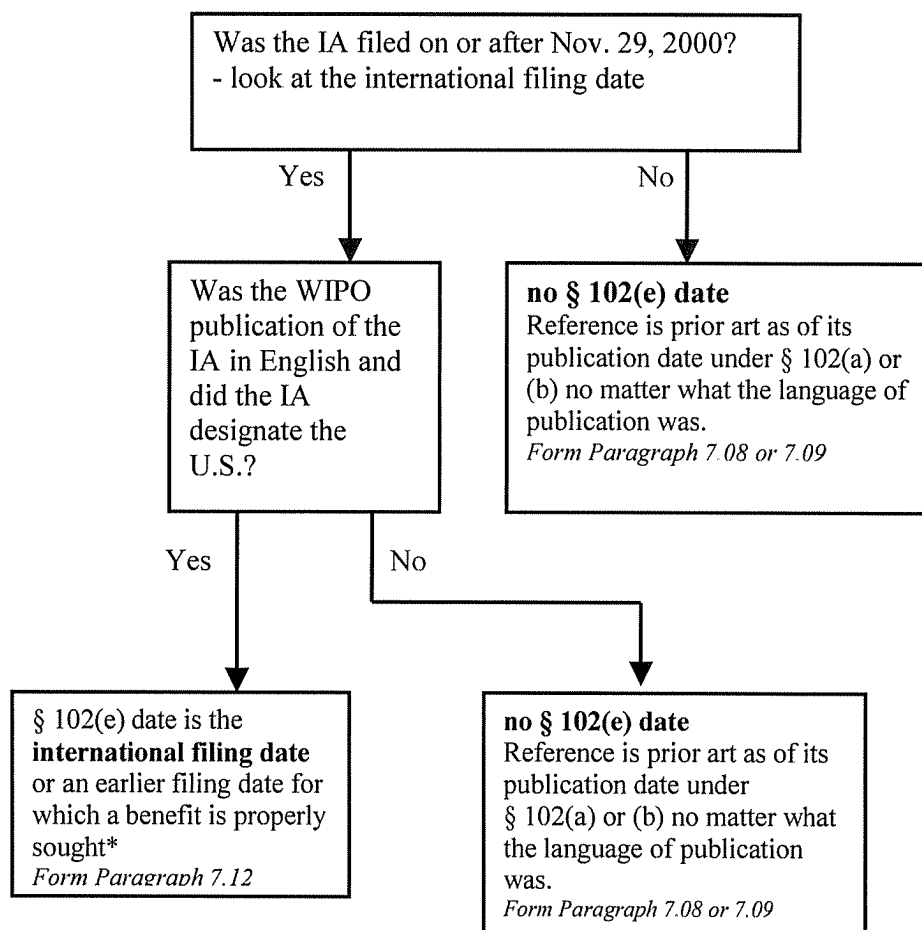
Apply to all applications and patents, whenever filed

Chart I: For U.S. patent or U.S. patent application publication under 35 U.S.C. § 122(b) (includes publications of § 371 applications)



* Consider benefit claims properly made under § 119(e) to U.S. provisional applications, § 120 to U.S. nonprovisional applications, and § 365(c) involving IAs. Do NOT consider foreign priority claims.

FLOWCHARTS FOR 35 U.S.C. § 102(e) DATES:
Apply to all applications and patents, whenever filed
Chart II: For WIPO publication of International Applications (IAs)



* Consider benefit claims properly made under § 119(e) to U.S. provisional applications, § 120 to U.S. nonprovisional applications, and § 365(c) involving IAs. Do NOT consider foreign priority claims.

Glossary of Terms:

U.S. patent application publication = pre-grant publication by the USPTO under 35 U.S.C. § 122(b)

International application (IA) = an application filed under the Patent Cooperation Treaty (PCT)

§ 371 application = an IA that has entered the national stage in the U.S. (35 U.S.C. § 371(c)(1), (2) and (4))

November 29, 2000 = the effective date for the amendments to §§ 102(e) and 374

WIPO = World Intellectual Property Organization

WIPO Publication = a publication of an IA under PCT Article 21(2) (e.g., Publication No. WO 99/12345)

§ 111(a) = provision of the patent code that states the **filing** requirements for **nonprovisional applications**

§ 111(b) = provision of the patent code that states the **filing** requirements for **provisional applications**

§ 119(e) = provision of the patent code that allows for **priority claims to provisional applications**

§ 119(a)-(d) = provision of the patent code that allows for **priority claims to foreign applications**

§ 120 = provision of the patent code that allows for **benefit claims to nonprovisional applications**

§ 365(c) = provision of the patent code that allows for **benefit claims to international applications**